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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
MULLEN, THOMAS J	

ART UNIT	PAPER NUMBER
2612	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/563,185	SCRIPT ET AL.	
	Examiner	Art Unit	
	Thomas J. Mullen, Jr.	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9,40-53 and 68-111* is/are pending in the application.

4a) Of the above claim(s) *1-9,40-53,68-75 and 91-111* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *76,77 and 79-90* is/are rejected.

7)☒ Claim(s) *78* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 December 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *12/30/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

1. Applicant's election without traverse of group III, claims 76-90 in the reply filed on 2/16/08 is acknowledged.

Claims 1-9, 40-53, 68-75, 91-111 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 2/16/08.

2. The related PCT (US04/21371) and US (10/613,518) application data, based upon which this application is a National Stage Application under 35 U.S.C. 371, should be inserted at the top of page 1 of the specification in the appropriate place.

3. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

4. Claims 87-90 are objected to under 37 CFR 1.75(c), which states in part that "(c)laims in dependent form shall be construed to include all the limitations of the claim incorporated by reference into the dependent claim". In this case claims 87-90 are directed to a "sensor" (i.e., "The sensor of..."), which is merely one element of claim 76 directed to a "movement detecting device"; thus, it is unclear whether or not claims 87-90 include all the limitations of claim 76.

5. Claim 78 is objected to under 37 CFR 1.75(a) for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 78, line 1, "said first and second circuits" lacks antecedent basis (note the dependency of the claim).

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 87-90 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

See paragraph 4 above. Where claims 87-90 each depend from claim 76 and claim 76 recites a "movement detecting device", it is unclear whether the "device" recited in claim 87, the "device" recited in claim 88, the "device" recited in claim 89 and/or the "system" recited in claim 90 are the same as, include, or are completely distinct from, the "device" recited in claim 76.

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 76-77 and 89-90 are rejected under 35 U.S.C. 102(b) as being anticipated by Lemelson (US 4337462, cited by applicant).

Note in Lemelson, object 11 (Fig. 1); accelerometers 16-18 (Fig. 2), respectively corresponding to "X", "Y" and "Z" directions (col. 2, lines 31-33); and control circuitry (primarily computer 24 in Fig. 2). As to claim 76, accelerometers 16-18 form an "inertial" sensor for detecting movement of the object 11. Further, the inertial sensor (16-18) is adapted to sense "multidirectional movement" based on the "X", "Y" and "Z" directions mentioned above. Still further, control circuitry (computer) 24 inherently "distinguish(es) a direction of movement" sensed by the sensor (note "all directions of movement" at col. 2, lines 44-48).

As to claim 77, X-axis accelerometer 16 and corresponding A/D converter 19 (Fig. 1) form a "first circuit" adapted for "sensing movement in a first direction"; Y-axis accelerometer 17 and corresponding A/D converter 20 (Fig. 1) form a "second circuit" adapted for "sensing movement in a second direction"; etc. As to claim 89, as shown in Fig. 2 the inertial sensor (16-18) is "disposed in a movement detecting and signal transmitting device" (note transmitter 28 and antenna 14 in Fig. 2) adapted to transmit a wireless RF signal (i.e. a "short wave" signal, col.

2, last 2 lines, to a "receiver" as shown in Fig. 3) in response to the sensor detecting inertial movement. As to claim 90, the inertial sensor (16-18) is "disposed in a...security system" (note "theft detection system", Title), which is inherently "portable" in that the operative components of the sensor/security system (Fig. 2) are physically combined in some manner with an article (which may include "portable" articles) capable of being transported or stolen (note col. 2, lines 16-21), and is adapted to forward a "security alert" to an "endpoint" (e.g., alarm 31 or the remote receiver of Fig. 3) in response to the sensor detecting inertial movement.

10. Claims 76, 79 and 87-88 are rejected under 35 U.S.C. 102(b) as being anticipated by Saab (US 5736923).

Note in Saab, object 2 (Fig. 1); inertial measurement unit (IMU) 3, comprising inertial sensors 5-7 (col. 4, lines 4-5) orthogonally oriented with respect to each other (col. 4, lines 14-16), and respectively corresponding to an "x-axis", a "y-axis" and a "z-axis" (col. 4, lines 17-22); and control circuitry (primarily computer 4 in Fig. 1). As to claim 76, sensors 5-7 collectively form "an" inertial sensor for detecting movement of the object 2. Further, the inertial sensor (5-7) is adapted to sense "multidirectional movement" based on the "x-", "y-" and "z-" axes mentioned above. Still further, control circuitry (computer) 4 inherently "distinguish(es) a direction of movement" sensed by the sensor (note "forward motion", "side-to-side motion" and "downward movement" at col. 4, lines 17-22).

As to claim 79, Saab further teaches that the sensor may be a "gyroscope" sensor (note the Abstract, lines 11-12; col. 3, lines 42-43; etc.). As to claim 87, the inertial sensor (5-7) is disposed in a "device" (vehicle 2) that is "activated or deactivated" (via computer 4 and control system 8) by the sensor detecting inertial movement (col. 4, lines 3-4). As to claim 88, the inertial sensor (5-7) is disposed in a "movement detecting device" (IMU 3) adapted to generate an output (10) in response to the sensor detecting inertial movement (col. 4, lines 3-4).

11. Claims 76 and 80 are rejected under 35 U.S.C. 102(a) as being anticipated by Dutta (US 2003/76408).

Note in Dutta, object 100 (Fig. 1); motion sensor assembly 302 (Fig. 3) comprising motion sensors (314X,314Y,314Z), respectively corresponding to "X", "Y" and "Z" directions

(para. 0020, last 6 lines); and control circuitry 304 ("processing engine" or "central processing unit", para. 0021). As to claim 76, sensors 314 (X,Y,Z) form an "inertial" sensor for detecting movement of the object 100. Further, the inertial sensor 314 (X,Y,Z) is adapted to sense "multidirectional movement" based on the "X", "Y" and "Z" directions mentioned above. Still further, control circuitry (processing engine) 304 inherently "distinguish(es) a direction of movement" sensed by the sensor 314 (X,Y,Z).

As to claim 80, Dutta further teaches that the sensor may be a "MEMS accelerometer" sensor (para. 0020, lines 6-7).

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13. Claim 81 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lemelson, further in view of either Campman (US 5317305) or Cameron et al (US 5811910).

Lemelson is relied upon as set forth above with respect to claim 76.

Note in Campman (Fig. 12, the Abstract, and col. 7, line 46 to col. 9, line 2), piezoelectric element 74; "flexible" diaphragm 70,76 (col. 8, lines 42-43 and 50-51); and mass 72.

Note in Cameron et al, piezoelectric element 25; "flexible" diaphragm 20 (col. 2, line 5); and mass 40.

The piezoelectric elements in each of Campman (74) and Cameron et al (25) are in the form of a piezoelectric "film". In view of either Campman or Cameron et al it would have been obvious to use a "piezo film" sensor as the accelerometer sensors 16-18 in Lemelson, since those skilled in the art would have recognized the ready availability, low cost and required sensitivity of this type of sensor, as well as its applicability to the type of system disclosed by Lemelson.

14. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or

improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

15. Claims 76-77 and 81-89 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-4 and 6-8 of U.S. Patent No. 6,940,405 in view of Lemelson.

Claim 1 in the '405 patent recites in part, "(a) portable security alarm system...comprising a movement detecting...means..., said movement detecting...means comprising an inertial sensor disposed within a vacuum environment". Thus, claim 1 of the '405 patent recites a movement detecting device comprising an inertial sensor, plus other elements. Claim 1 of the '405 patent fails to specify that the inertial sensor "sense(s) multidirectional movement", or that associated control circuitry "distinguishes a direction of movement" sensed by the sensor, as recited in claim 76 herein. However, these concepts are well known in the art, note the teachings of Lemelson as discussed in paragraph 9 above. Therefore, it would have been obvious to use "a movement detecting device comprising an inertial sensor" in the manner recited in claim 76 herein, since one skilled in the art would have recognized that such use would make the sensor applicable to a wide variety of particular sensing environments and/or conditions.

As to claim 77 herein, Lemelson further teaches "first" and "second" circuits as discussed in paragraph 9 above. Claim 81 herein corresponds to claim 2 in the '405 patent. As to claim 82

herein, claim 5 in the '405 patent is similar to claim 1 therein, further specifying that the inertial sensor comprises a "piezoelectric...transducer" having a "piezoelectric element" and a "mass" (both attached to a "diaphragm"); it appears to be inherent in the structure recited in claim 5 in the '405 patent that the mass is "operatively attached to flex (the) piezoelectric element". Claim 83 herein corresponds to claim 8 in the '405 patent. As to claim 84 herein, claim 3 in the '405 patent (depending from claim 1 therein) further specifies that the sensor includes a "piezoelectric element", and claim 1 in the '405 patent recites the "vacuum environment". Claim 85 herein corresponds to claim 4 in the '405 patent. Claim 86 herein corresponds to claim 6 in the '405 patent. As to claims 87-88 herein, the "portable security alarm system" of claim 1 in the '405 patent may be construed as a "device" (or "movement detecting device") that is "activated or deactivated" (to "generate an output") by the sensor detecting inertial movement. As to claim 89 herein, the "portable security alarm system" of claim 1 in the '405 patent may be construed as a "movement detecting and signal transmitting device" for transmitting a wireless RF signal (note "wirelessly transmitting a predetermined signal") in response to the sensor detecting inertial movement.

16. No rejection(s) under 35 U.S.C. 102/103 of claims 78 and 82-86 is/are considered appropriate at this time.

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The remaining art cited by applicant has been considered. McIntyre (US 6654685) and Rasmussen (US 6989746) are cited to further show the state of the art.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Mullen, Jr. whose telephone number is 571-272-2965. The examiner can normally be reached on Monday-Thursday from 6:30 AM to 4 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Wu, can be reached on (571) 272-2964. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Thomas J. Mullen, Jr./
Primary Examiner, Art Unit 2612